

Form A:

Geometry: Inverse Trig Functions

Name _____

Homework #72B

Date _____ Period _____

* ON YOUR CALCULATORS,

Find each angle measure to the nearest degree.

WHEN FINDING ANGLE MEASURES, YOU HAVE TO

HIT \cos^{-1} , \sin^{-1} ,

OR \tan^{-1} , THEN THE DECIMAL. THIS WILL

GIVE YOU A # THAT IS THE \angle MEASURE!

1) $\cos Z = 0.9848$

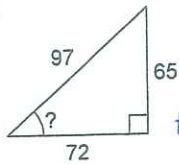
2) $\sin W = 0.1045$

3) $\cos W = 0.9925$

4) $\sin C = 0.5150$

Find the measure of the indicated angle to the nearest degree.

5)

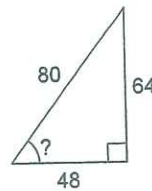


CAN USE \sin , \cos , OR \tan HERE

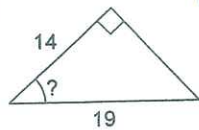
EX. $\sin ? = \frac{65}{97}$

$\sin^{-1} ? = \frac{65}{97} = \angle \text{ MEASURE}$

6)



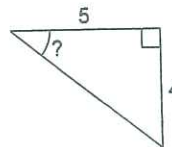
7)



$\cos ? = \frac{14}{19}$

$\cos^{-1} ? = \frac{14}{19}$

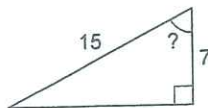
8)



$\tan ? = \frac{3}{4}$

$\tan^{-1} ? = \frac{3}{4}$

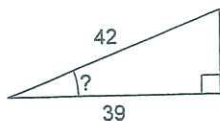
9)



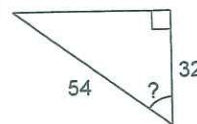
10)



11)



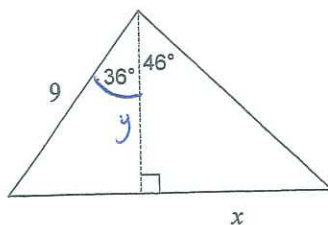
12)



Find the length of the side labeled x . Round intermediate values to the nearest tenth. Use the rounded values to calculate the next value. Round your final answer to the nearest tenth.

SAME

13)



$\cos 36 = \frac{y}{9}$

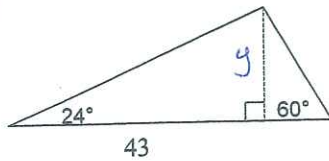
once you find y ,
USE \cos once more to find x .

14)

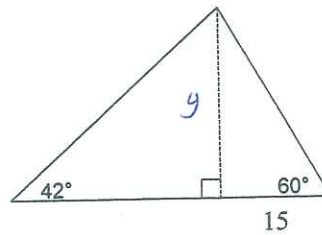


Find the area of each triangle. Round intermediate values to the nearest tenth. Use the rounded value to calculate the next value. Round your final answer to the nearest tenth.

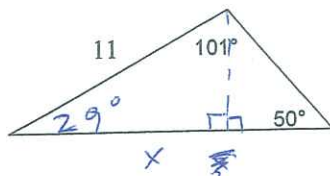
15)



16)



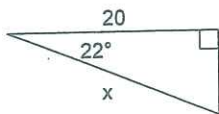
17)



$$\cos 29^\circ = \frac{x}{11}$$

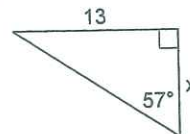
Find the missing side. Round to the nearest tenth.

19)



$$\cos 22^\circ = \frac{20}{x}$$

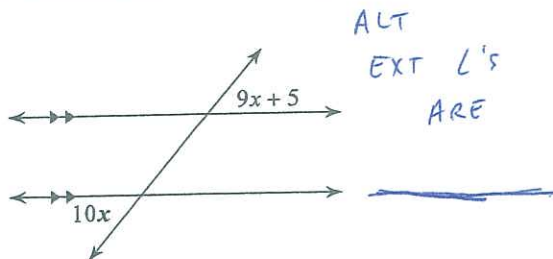
20)



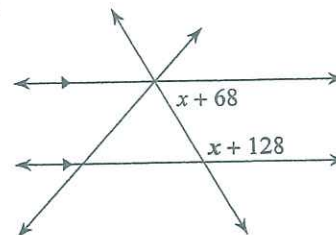
$$\tan 57^\circ = \frac{13}{x}$$

Find the measure of the angle indicated in bold.

21)



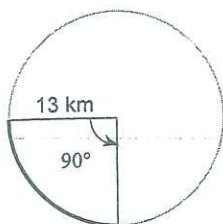
22)



CONSECUTIVE
INTERIOR L's
ADD TO 180°

Find the length of each arc.

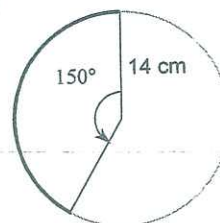
23)



Circumference $2\pi r$

$$\frac{90}{360} (2\pi r)$$

24)



Circumference $2\pi r$

$$\frac{150}{360} (2\pi r)$$